

Fig. 1

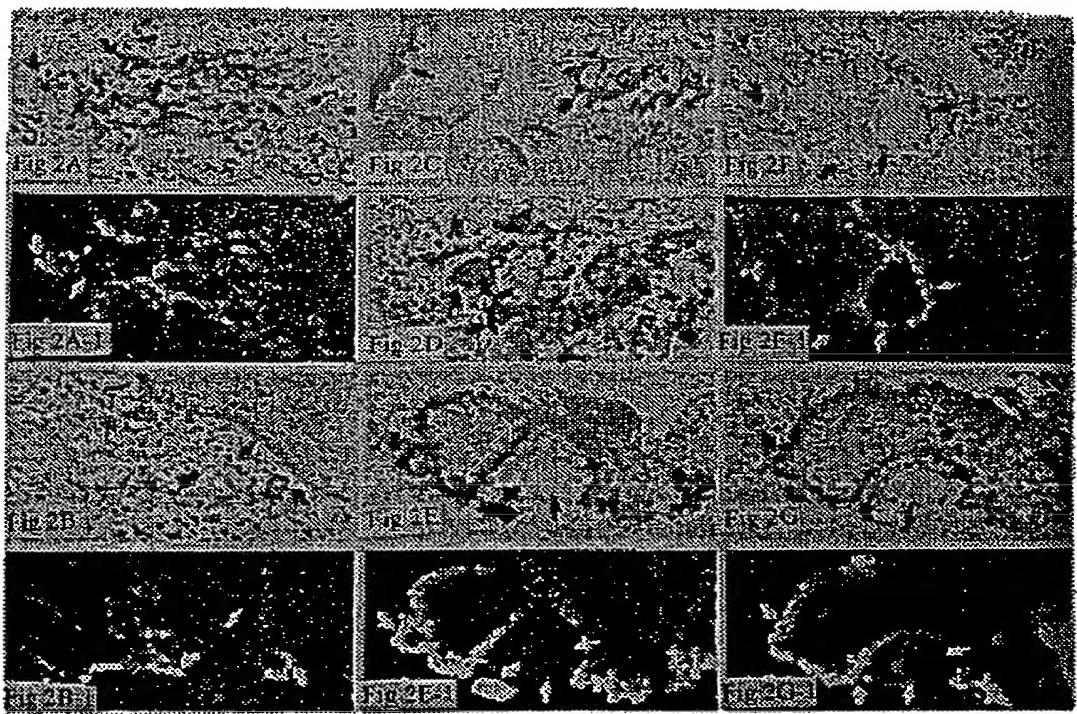


Fig. 2

000000000000000000000000

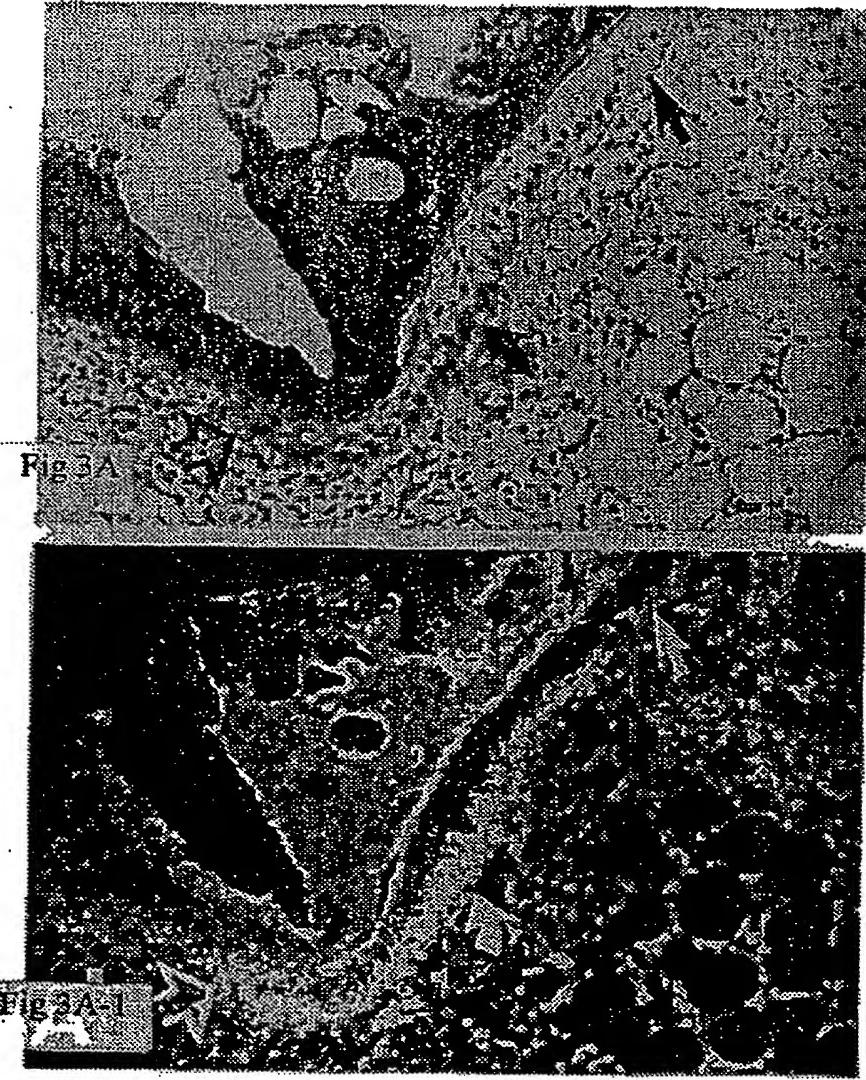


Fig. 3

**FIG 4A** (SEQ ID NO.:12 & 13)

1 gaccacactga tcgaaggaaa aggaaggcac agcggagcgc agagtgagaa ccacccaaccc  
61 aggccgggg cagcgacccc tgcagcggag acagagactg agcggccgg caccgcccattg  
1 M  
121 cctgcgtctt ggctgggctg ctgcctctgc ttctcgcttc ttctgccccgc agccccggggcc  
2 P A L W L G C C L C F S L L L P A A R A  
181 acctccagga gggaaagtctg tgattgcaat gggaaagtcca ggcagtgttat ctttgatcg  
22 T S R R E V C D C N G K S R Q C I F D R  
{:> Domain V  
241 gaacttcaca gacaactgg taatggattc cgctgcctca actgcaatga caacactgt  
42 E L H R Q T G N G F R C L N C N D N T D  
301 ggcattcaact gcgagaagtgc caagaatggc ttttaccggc acagagaaag ggacccgtgt  
62 G I H C E K C K N G F Y R H R E R D R C  
361 ttgccctgca attgttaactc caaagggttct cttagtgttc gatgtgacaa ctctggacgg  
82 L P C N C N S K G S L S A R C D N S G R  
421 tgcagctgt aaccagggtt gacaggagcc agatgcgacc gatgtctgcc aggcttccac  
102 C S C K P G V T G A R C D R C L P G F H  
481 atgctcacgg atgcgggggtg cacccaaagac cagagactgc tagactccaa gtgtgactgt  
122 M L T D A G C T Q D Q R L L D S K C D C  
541 qacccagctg gcatcgagg gccctgtgac gccccccgct gtgtctgcaa gccagctgtt  
142 D P A G I A G C P D A G R C V C K P A V  
601 actggagaac gtgtgatag gtgtcgatca ggtaataata atctggatgg ggggaacctt  
162 T G E R C D R C R S G Y Y N L D G G N P  
661 gagggctgt a ccagtgttt ctgctatggg cattcagcca gtcggcag ctctgcagaa  
182 E G C T Q C F C Y G H S A S C R S S A E  
{:> Domain IV  
721 tacagtgtcc ataagatcac ctctacccctt catcaagatg ttgtatggctg gaaggctgtc  
202 Y S V H K I T S T F H Q D V D G W K A V  
781 caacgaaatg ggtctccctgc aaagctccaa tggtcacagc gccatcaaga tggatgtttac  
222 Q R N G S P A K L Q W S Q R H Q D V F S  
841 tcagcccaac gactagatcc tggatgtttt gttgtcttc cccaaatttct tggaaatcaa  
242 S A Q R L D P V Y F V A P A K F L G N Q  
901 caggtgagct atggccaaag cctgtccctt gactaccgtg tggacagagg aggtagac  
262 Q V S Y G Q S L S F D Y R V D R G G R H  
961 ccatctgccc atgatgtgtat cctggaaagg gctggatctac ggatcacagc tcccttgatg  
282 P S A H D V I L E G A G L R I T A P L M  
1021 ccacttggca agacactgcc ttgtgggctc accaagactt acacattcag gttaaatgt  
302 P L G K T L P C G L T K T Y T F R L N E  
1081 catccaagca ataattggag ccccccagctg agttactttt agtactcgaag gttactgcgg  
322 H P S N N W S P Q L S Y F E Y R R L L R  
1141 atatccacag ccctcccgat ccgagatcata tatggaaat acatgtactgg gtacattgac  
342 N L T A L R I R A T Y G E Y S T G Y I D  
1201 atatgtgaccc tgatattcgc ccccccgtc tctggagccc cagcacccctg gttgtaaac  
362 N V T L I S A R P V S G A P A P W V E Q  
1261 tgtatatgtc ctgttgggtt caaggggcaaa ttctgcccagg attgtgtttc tggctacaag  
382 C I C P V G Y K G Q F C Q D C A S G Y K  
{:> Domain III  
1321 agagattcag cgagactggg gcctttggc acctgtatcc ttgtactg tcaaggggg  
402 R D S A R L G P F G T C I P C N C Q G G  
1381 gggccctgtg atccagacac aggagattgt tattcaggg atgagaatcc tgacattgag  
422 G A C D P D T G D C Y S G D E N P D I E  
1441 tgtgtgtact gccccattgg ttcttacaac gatccgcacg accccccgcag ctgcaagcca  
442 C A D C P I G F Y N D P H D P R S C K P  
1501 tgtccctgtc ataacgggtt cagctgtca gtgattccgg agacggagga ggtgggtgtc  
462 C P C H N G F S C S V I P E T E E V V C

**FIG 4B**

(SEQ ID NO.:12 &amp; 13)

1561 aataactgcc ctccccgggt caccgggtgcc cgctggtgagc tctgtgtcga tggctacttt  
 482 N N C P P G V T G A R C E L C A D G Y F  
 1621 ggggacccct ttggtaaca tggcccaatg aggcccttgc agccctgtca atgcaacacgc  
 502 G D P F G E H G P V R P C Q P C Q C N S  
 1681 aatgtggacc ccagtgcctc tggaaattgt gacccggctga caggcagggt tttgaagtgt  
 522 N V D P S A S G N C D R L T G R C L K C  
 1741 atccacaaca cagccggcat ctactgcgac caatgcaag caggtactt cggggacc  
 542 I H N T A G I Y C D Q C K A G Y F G D P  
 1801 ttggctcca acccagaga caatgtcga gcttgcaact gtaacccat gggctcagag  
 562 L A P N P A D K C R A C N C N P M G S E  
 1861 cctgttaggat gtcgaatgtga tggcacctgt gtttgcaagc caggatttg tggcccaac  
 582 P V G C R S D G T C V C K P G F G G P N  
 1921 tgtgagcatg gaggattcag ctgtccatcg tgcataatc aatgtaaatgatcagatggat  
 602 C E H G A F S C P A C Y N Q V K I Q M D  
 {=0 Domain I/II  
 1981 cagtttatgc agcagcttca gagaatggag gcccgtatcaaaggctca ggggtggat  
 622 Q F M Q Q L Q R M E A L I S K A Q G G D  
 2041 ggagtagtac ctgatcaga gctggaaaggc aggatgcagc aggctgagca gccccttcag  
 642 G V V P D T E L E G R M Q Q A E Q A L Q  
 2101 gacattctga gagatccccca gatttcagaa ggtgtatca gatcccttgg tctccatgt  
 662 D I L R D A Q I S E G A S R S L G L Q L  
 2161 gccaagggtga ggagccaaga gaacagctac cagagccgccc tggatgaccc caagatgact  
 682 A K V R S Q E N S Y Q S R L D D L K M T  
 2221 gtggaaagag ttccggctct gggaaatgtcag taccagaacc gagttcggg tactcacagg  
 702 V E R V R A L G S Q Y Q N R V R D T H R  
 2281 ctcatcaactc agatgcacgt gagectggca gaaatgtaaatgttggg aaacactaac  
 722 L I T Q M Q L S L A E S E A S L G N T N  
 2341 attccctgcct cagaccacta cgtggggcca aatggcttta aaatgtctggc tcaggaggcc  
 742 I P A S D H Y V G P N G F K S L A Q E A  
 2401 acaagattag cagaagccca cgttgatgtca gccagtaaca tggagcaact gacaaggaaa  
 762 T R L A E S H V E S A S N M E Q L T R E  
 2461 actgaggact attccaaaca agccctctca ctgggtgcga agggccctgc tgaaggagtc  
 782 T E D Y S . K Q A L S L V R K A L H E G V  
 2521 ggaagcggaa gcggttagccc ggacgggtgtcgtggtaaag ggcttggaa aaaaattggag  
 802 G S G S G S P D G A V V Q G L V E K L E  
 2581 aaaaccaatg ccctggccca gcgttgaca agggaggcca ctcaagcggaa aattgtaaagca  
 822 K T K S L A Q Q L T R E A T Q A E I E A  
 2641 gataggctt atcagcacag tctccgcctc ctggattcag tgcgtccgt tcaggaggatc  
 842 D R S Y Q H S L R L L D S V S P L Q G V  
 2701 agtgcacgt cctttcaggt ggaagaagca aagaggatca aaaaaaaagc ggattcaactc  
 862 S D Q S F Q V E E A K R I K Q K A D S L  
 2761 tcaagcctgg taaccaggca tatggatgtatcaagcataaaaaagaa tctggaaac  
 882 S S L V T R H M D E F K R T Q K N L G N  
 2821 tggaaagaag aagcacagca gctttacag aatggaaaaatgtggagaga gaaatcagat  
 902 W K E E A Q Q L L Q N G K S G R E K S D  
 2881 cagctgtttt cccgtgccaa tcttgcataaa agcagagcac aagaagcact ggtatgggc  
 922 Q L L S R A N L A K S R A Q E A L S M G  
 2941 aatgcacatt ttatgtaaatgtcgtatc cttaaaaacc tcagagatgtgatc  
 942 N A T F Y E V E S I L K N L R E F D L Q  
 3001 gtggacaaca gaaaagcaga agtgcacgt gccatgtaa gactcttca catcagccag  
 962 V D N R K A E A E E A M K R L S Y I S Q  
 3061 aagggttcag atgcccgtga caagacccag caagcagaaa gagccctgg gaggcgtgc  
 982 K V S D A S D K T Q Q A E R A L G S A A  
 3121 gctgtatgcac agaggccaa gaatggggcc ggggaggccc tggaaatctc cagtgatggatt  
 1002 A D A Q R A K N G A G E A L E I S S E I

**FIG 4C**

(SEQ ID NO.:12 &amp; 13)

3181 gaacaggaga ttgggagtc gaacttggaa gccaatgtga cagcagatgg agccttggcc  
1022 E Q E I G S L N L E A N V T A D G A L A  
3241 atggaaaagg gactggcctc tctgaagagt gagatgaggg aagtggaaagg agagctggaa  
1042 M E K G L A S L K S E M R E V E G E L E  
3301 aggaaggagc tggaggatgc cacgaatatg gatgcagtagc agatggtgat tacagaagcc  
1062 R. K E L E F D T N M D A V Q M V I T E A  
3361 cagaagggtt ataccagagc caagaacgct ggggttaaaa tccaagacac actcaacaca  
1082 Q K V D T R A K N A G V T I Q D T L N T  
3421 ttagacggcc tcctgcattt gatggaccag ctcttcgt tagatgaaga ggggctggc  
1102 L D G L L H L M D Q P L S V D E E G L V  
3481 ttactggagc agaagcttc ecgagccaag acccgatca acagccaact gggcccattg  
1122 L E Q K L S R A K T Q I N S Q L R P M  
3541 atgtcagagc tggaaagag ggcacgtcag cagaggggcc acctccattt gctggagaca  
1142 M S E L E E R A R Q Q R G H L H L L E T  
3601 agcatagatg ggatttggc tgatgtgaag aacttggaga acattaggga caacctgccc  
1162 S I D G I L A D V K N L E N I R D N L P  
3661 ccaggctgtc acaataccca ggcttggag caacagtcaa gctggccataa atatttctca  
1182 P G C Y N T Q A L E Q Q //

3721 actgaggttc ttggataca gatctcaggc ctcggagcc atgtcatgtg agtgggtggg  
3781 atggggacat ttgaacatgt ttaatggta tgctcaggc aactgacctg accccatccc  
3841 tgatcccattt gcccagggtt tgcttattt caccatactc ttgttttctt gatgtctggc  
3901 atgaggcaga taggcactt tggtgataatc atcaaggatc tggaccccaa agatagactg  
3961 gatggaaaga caaactgcac aggcatgtt ttgcctcata atagtcgtaa gtggagtctt  
4021 ggaatttggc caagtgtgt tggtatata tcaactttt ctttgatgtaa tttgactaaa  
4081 gaaaaaaact ttgactttgc ccaggcatga aatttttctt aatgtcagaa cagagtgc  
4141 cccagtcaca ctgtggccag taataacta ttgcctcata ttgtttctt ctgttttttt  
4201 gctgtcaga ttccctcta ctacaaccc aggggtgtt catgttttcc attttcaagc  
4261 tggaaagat ggcgtgtt gggttgggat cctgttggc agggccatcc agagctatgg  
4321 tgcttgcgtt tgcttgcac cttaagttc tggaccttggg catgacatcc tttttttt  
4381 tgatgccatg gcaacttata gattgttattt ttattaaagc atttcttacc agcaagca  
4441 atgttggaa agtattttact ttgttggttt caaagtata gaaaatgtgtg gtttggcat  
4501 tggaaagatgaaaatttttctt agtattttata gtccttattt aatcttactt ttcaacacc  
4561 aaaaatgtatgcgcataatgt ttttttttcttca attccttctc tttttcttcc  
4621 accccataata agagaatgtt ctactcaca cttcagctgg gtcacatcca tcccttccatt  
4681 catcccttcca tccatcttccatccattac ctccatccat cttccaaaca tatattttatt  
4741 gaggatctac tggatgttccag gggttgggtt gacagtgggtt acatagtc tgccttcata  
4801 gaggatgtt tcttagtggg aagacaagca ttttttttttataaattttttttaa acttacaaac  
4861 ttgtttgtt acaagttgtt ttattttttca taaccgtttt gtttgcaccc tttttgttca  
4921 acagaacata ttgttgcaga cccatccatg ggcactgtt gtttgcaccc tgacagatc  
4981 ctgggttgtt cacatttttgcattccat cgtcactctt tgccttcttac aactgttgc  
5041 aacagactgt tgatgttata taacaccatg gggaaattgtt gggaaatccca gaggcactt  
5101 caccttggct gggaaagacta ttgttgcaccc ttgttttttttcaatttttttttca  
5161 aagtgtttttt aaataaaagaa caattttttttttag atgcacaaaaa //

**FIG 4D**

(SEQ ID NO.:14 & 15)

3421 ttagacggcc tcctgcatct gatgggtatg tgaaccacaca acccacaacc ttccagc::cc  
1102 L D G L L H L M G M \*

3481 atgcctccagg gctttgtcc agaacactca ctataacctag ccccagcaaa ggggagtctc  
3541 agctttccctt aaggatatca gtaaatgtgc tttgttcca ggcccagata actttcgca  
3601 gtttccctta catttactgg accctgtttt accgttgcta agatgggtca ctgaacacct  
3661 attgcacttg gggtaaagg tctgtggcc aaagaacagg tgtatataag caacttcaca  
3721 gaacacgaga cagcttggga atcctgctaa agagtctggc ctggaccctg agaagccagt  
3781 ggacagttt aagcagagga atAACATCAC cactgtatat ttcaaaaaaaa tcactagggc  
3841 agccgagtgg aggaaagctt gaagaggggg ttagagatgg ggcaggttga gactactaa  
3901 gatattgttta aaaaaatttga agagagaaat gacaggagcc tgctctaagg cagtagaaatg  
3961 gtggcttggga agatgtgaag gaagattttccagctgtg aagtcaagaa tcacttggcg  
4021 gcccgggtgtg gtggctcacg cctgtatcc tagcactttg ggagactgaa gcgggtggat  
4081 cacccgaggt caggagttga agaccagcct ggccaaacatg gtggaaaccct gtctctacta  
4141 aaagtacaaa aatttagctgg atgatgggtgg tgggcggctg taattccagc tactcaggag  
4201 tctgaggcag gagaatcgct tgaaccacagg aggcgaggtt acagtgagcc aagattgcac  
4261 cactgtctt ccagcttggg aacagagaga ctgcctaaaa aaaaaaaaaa aaaaaa //

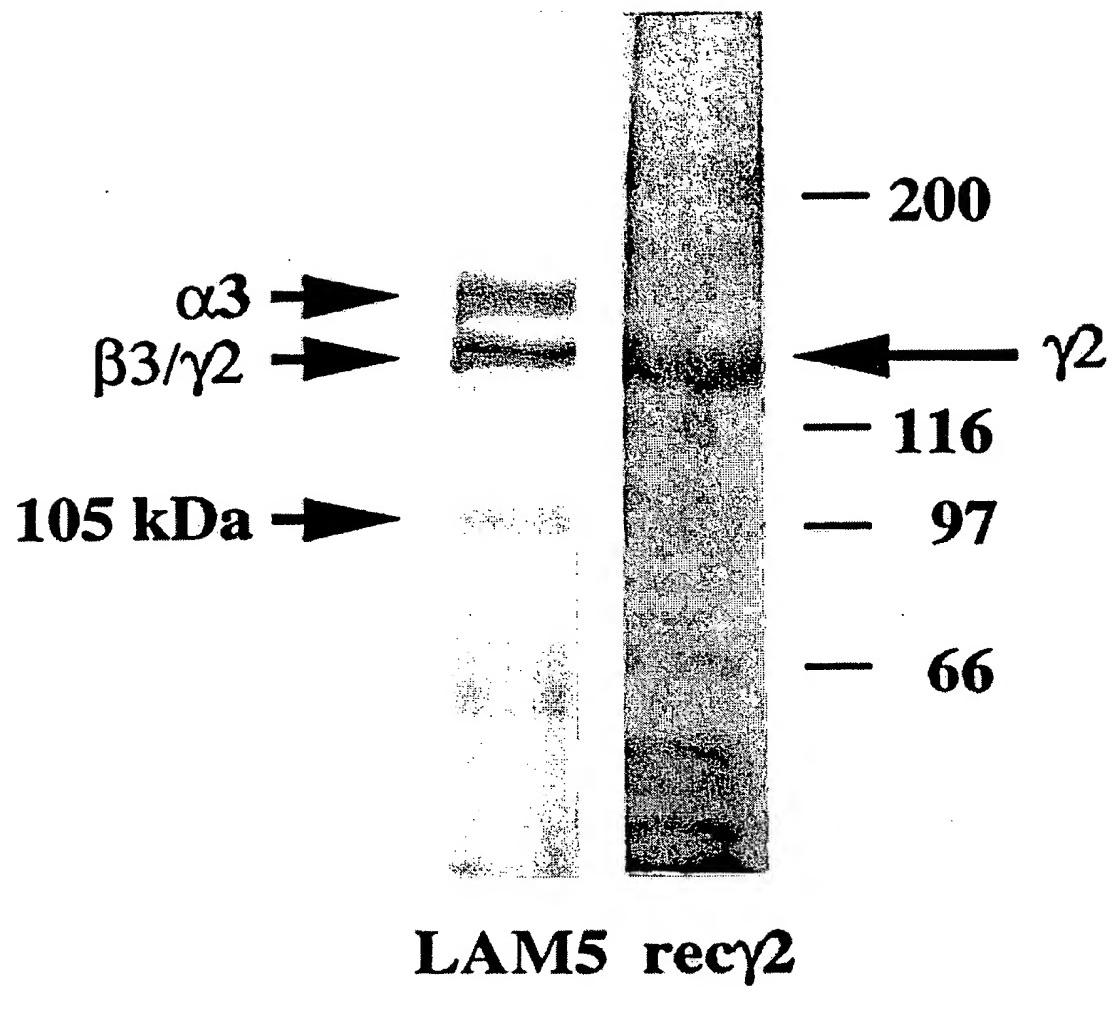


Fig. 5

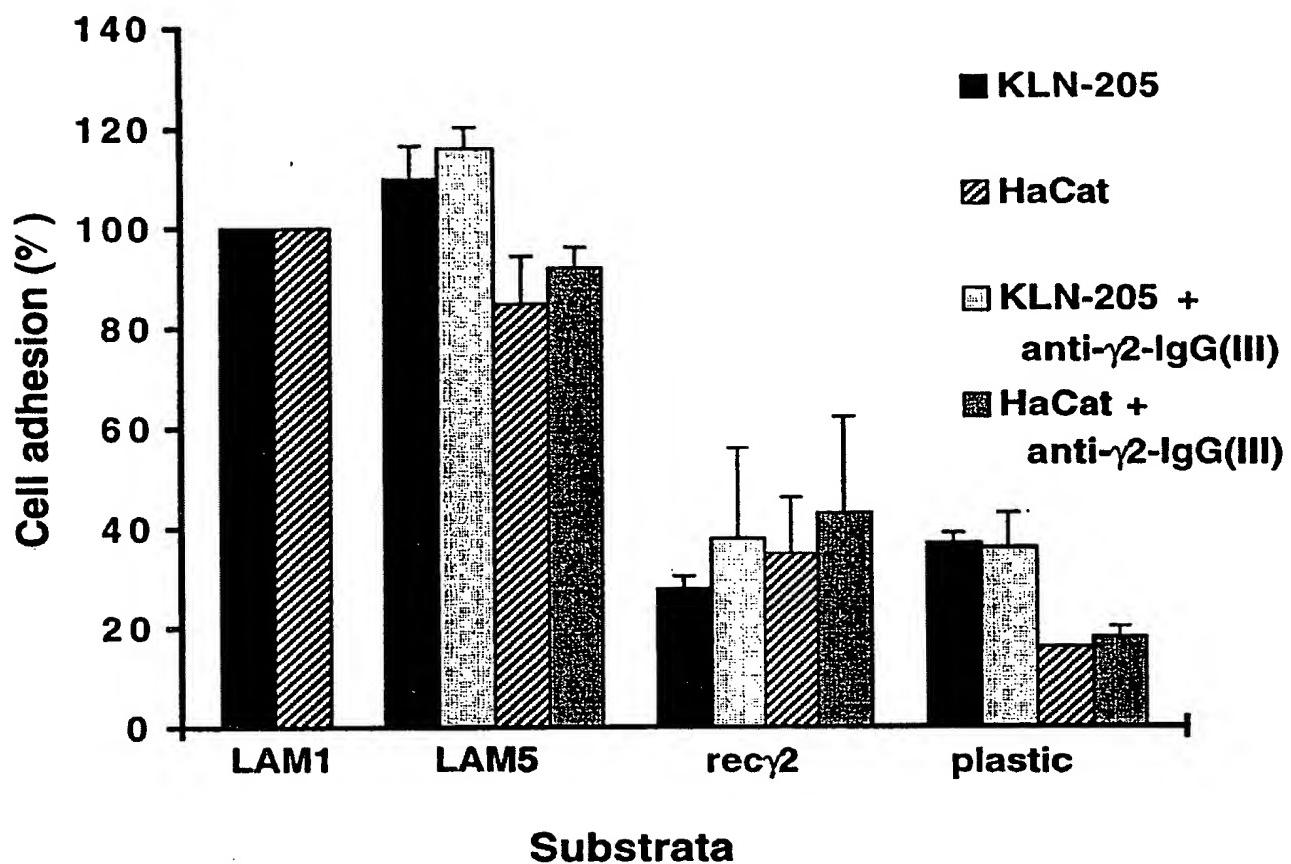
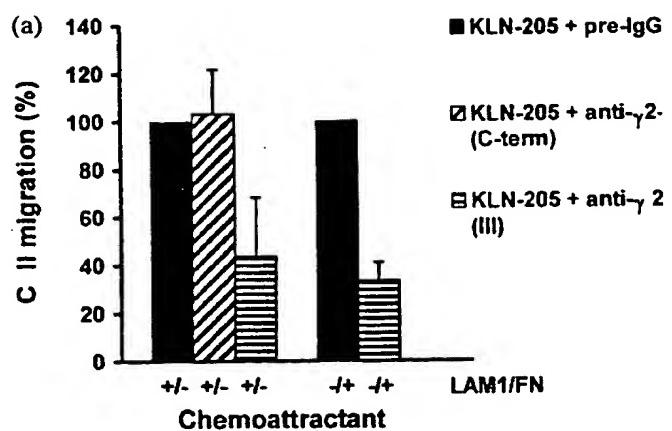
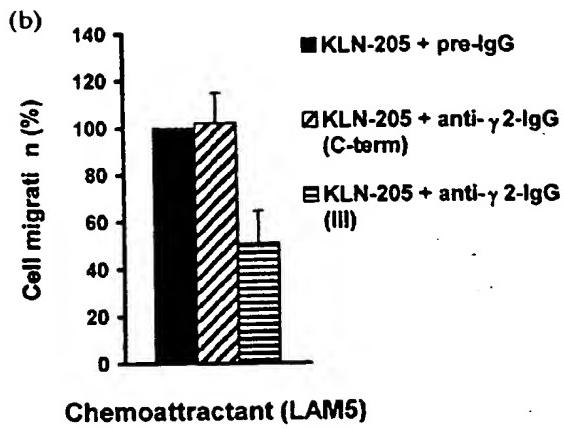


Fig. 6



A



B

Fig 7

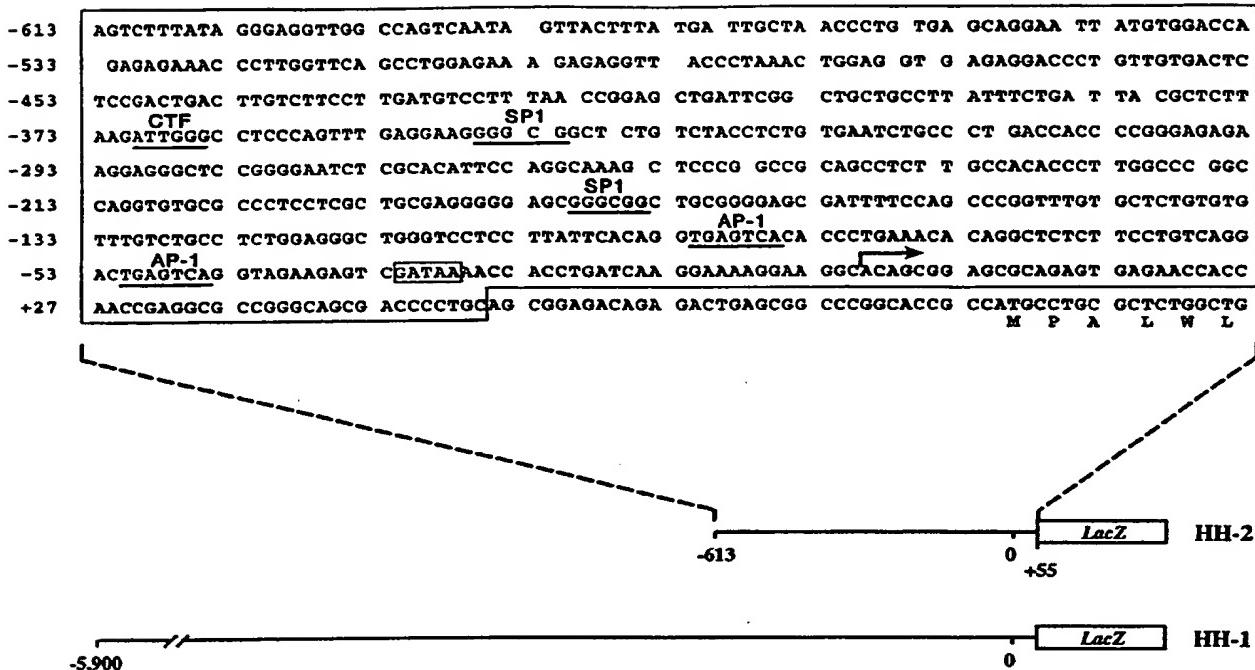


Fig. 8

000000000000000000000000

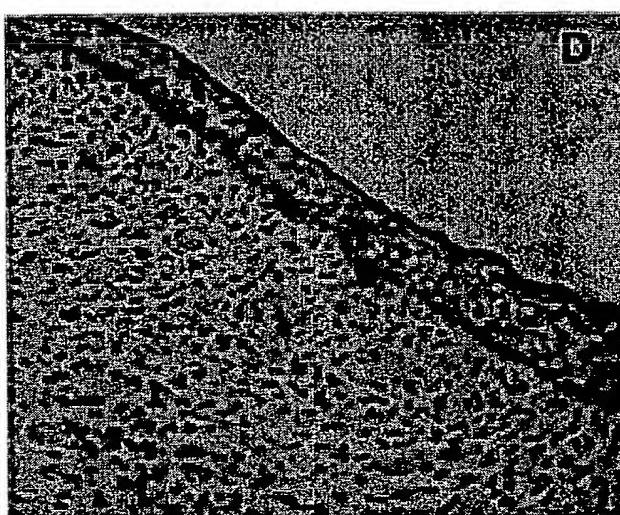
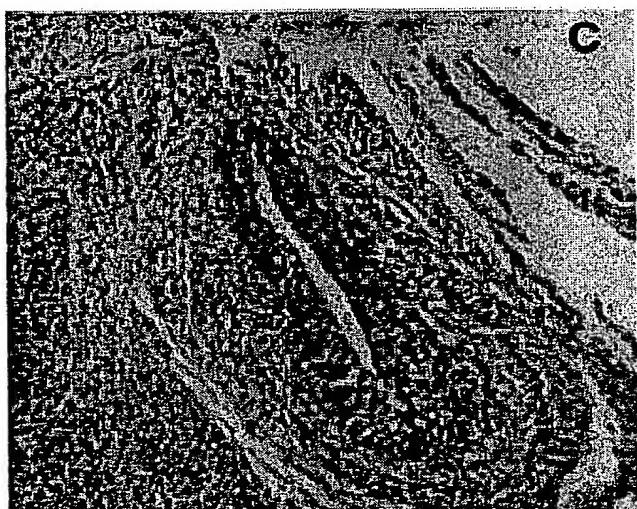
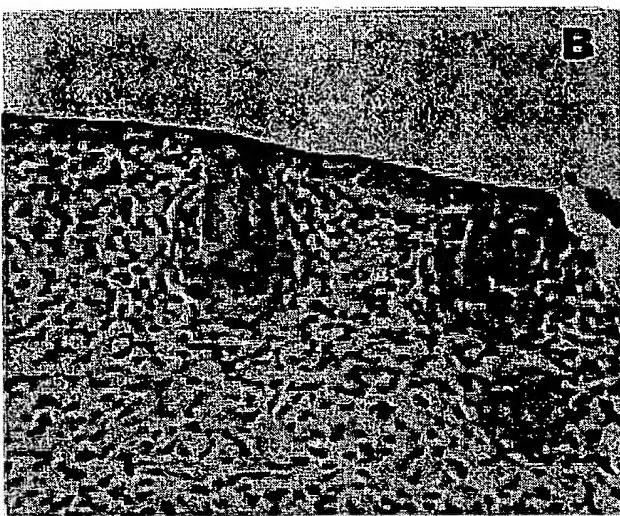


Fig. 9

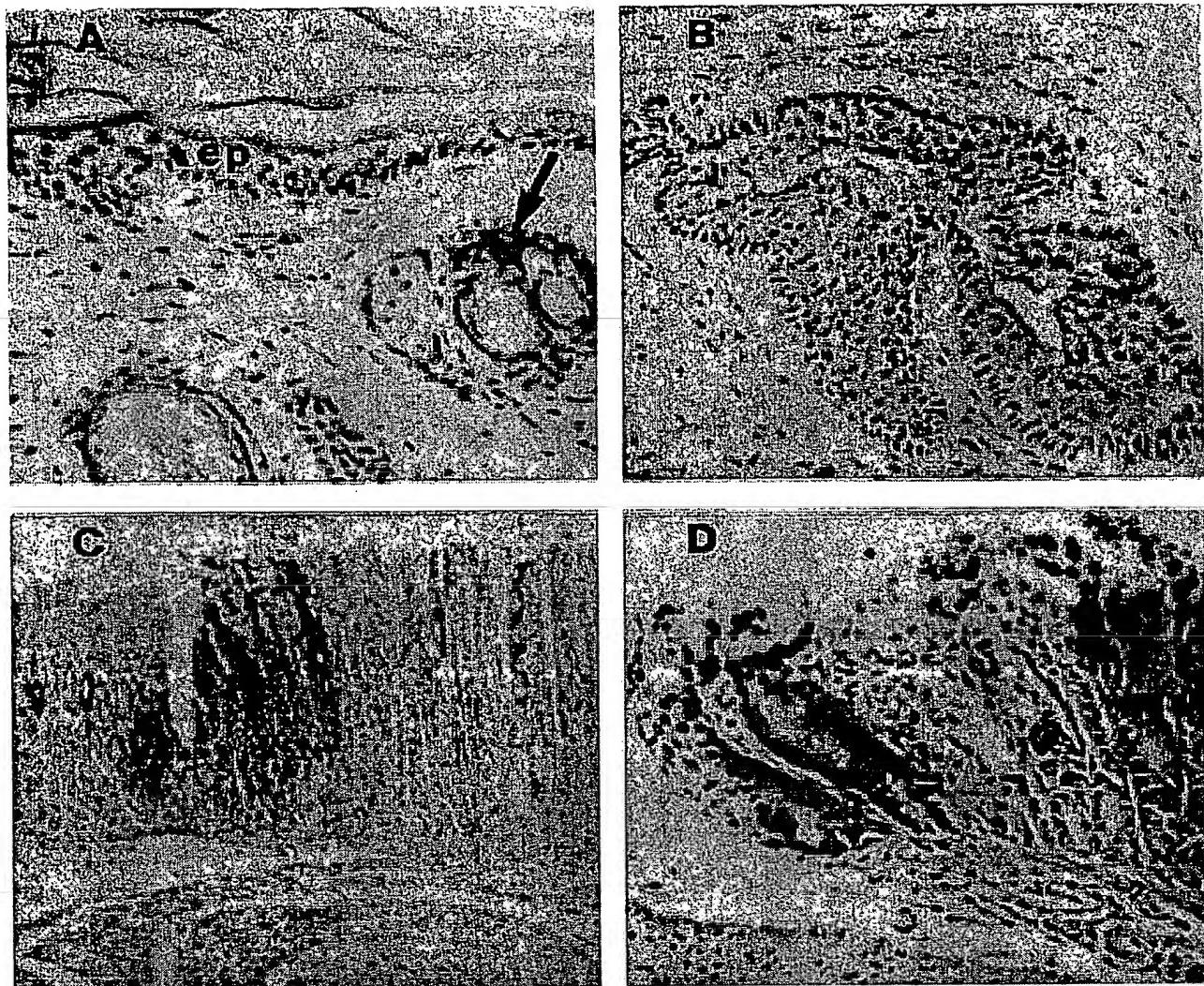


Fig. 10

000000000000000000

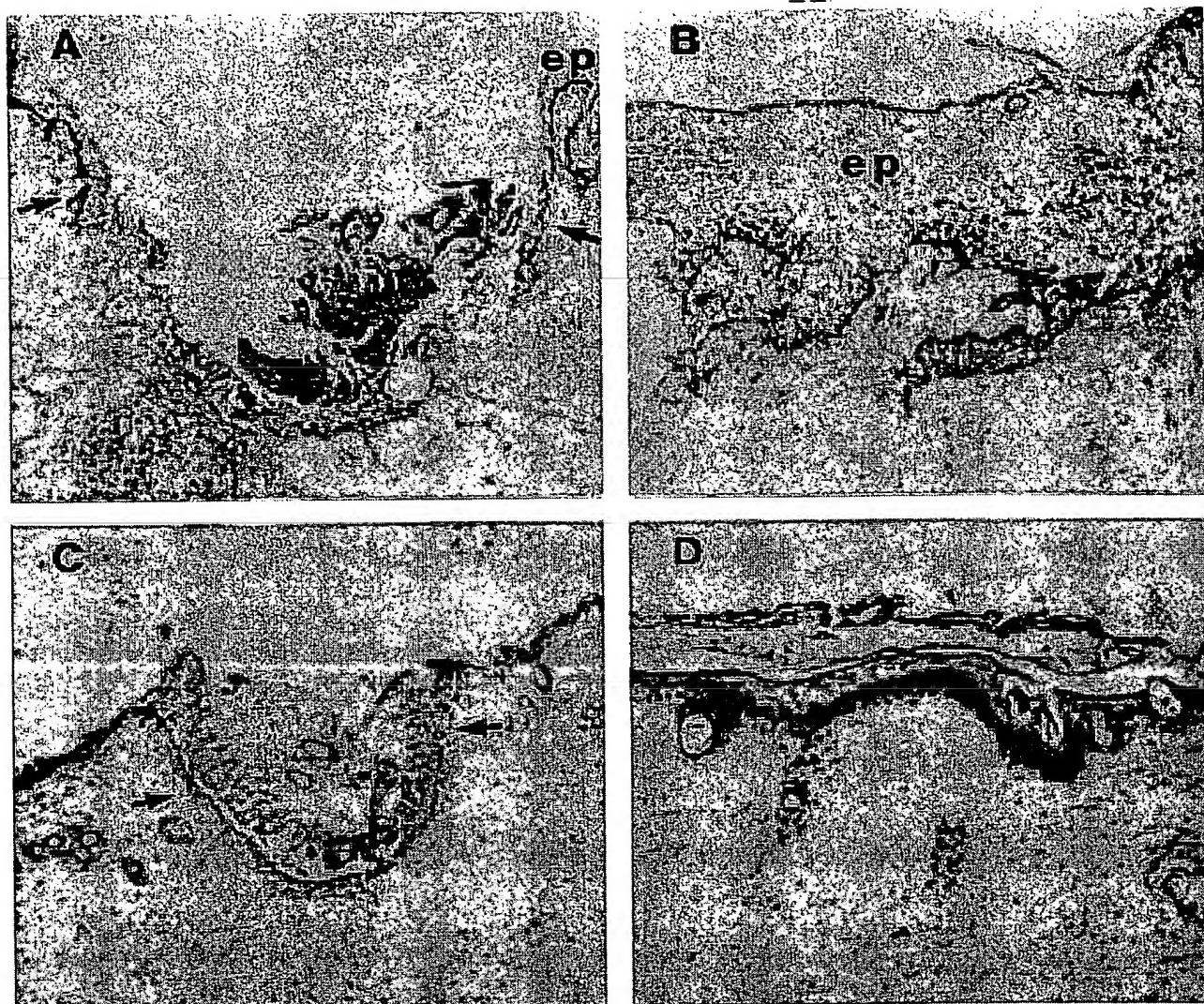


Fig. 11